



## SOLE SOURCE CERTIFICATE AND POSTING NOTICE

A sole source procurement is when you make a request to purchase product(s) and/or service(s) without competition when competition is otherwise required. This means that product/service is unique and that the supplier is the only supplier that can provide the product or service. In accordance with the authority granted under applicable Florida law and UCF Regulation 7.130, the following documentation is submitted in support of this request.

The purchase requisition can be entered into UCF Financials at any point during the process set forth herein; however, doing so does not ensure approval of the sole source.

The completed sole source must be approved in the following order. **Please be sure to obtain all required signatures before submitting the form to Procurement Services.**

- PI/Researcher/Director/Chair
- President/Vice President/Dean
- Procurement Specialist
- Procurement Services Associate Director
- Assistant Vice President for Tax, Payables & Procurement, who will review and provide a recommendation to approve or disapprove the sole source to:
- Chief Financial Officer, who will either directly approve or disapprove the sole source, or forward it to the Provost and Executive Vice President for goods/services related to academia for input prior to making the final decision.

Contingent upon the approval of all the officers/individuals listed, the sole source shall be posted on the UCF Procurement Services website for seventy-two (72) business hours. Upon expiration of said posting period, Procurement Services will process a purchase order upon receipt of the requisition.

Once the completed sole source is received, Procurement Services reviews the documentation provided and determines whether the sole source is valid or if there are additional suppliers that may be able to provide the requested product or service. The sole source review and approval process varies based on the nature of the product/service being requested and the information provided in the requestor's justification, among other factors, so please keep this in mind when submitting the form.

**The usual bidding process shall be conducted if sole source approval is not granted.**

**PART I: DEPARTMENT AND SUPPLIER INFORMATION**

Department Name: ECE

Contact & Phone: Reyner (407)823-5361

Purchase Request No.: \_\_\_\_\_

Product/Service Cost: \$75,823.58

Company Name: Keysight Tehcnologies

Email: yamilet.ardavin@keysight.com

Contact Person: Yamilet Ardavin

Title: Sales representative

Product and/or Service: new UXA N9040B with 50GHz and 510MHz analysis Bandwidth

Telephone: (954)412-9568

Facsimile: \_\_\_\_\_

Address: 1900 Garden of the Gods Road

City: Colorado Springs

State and Zip: CO 80907-3423

**PART II: SOLE SOURCE JUSTIFICATION (see pages 4-5)**

**Only justifications submitted on this form and in the below format will be reviewed for approval. All of the below listed points MUST be fully answered on the following pages and any additional attached pages as needed. Failure to submit justification as outlined in the format below will result in the form being returned without review.**

1. Describe the product(s) and/or service(s) and anticipated use thereof in layman's language.
2. State in detail why only this and no other product(s)/service(s) will satisfy the department's requirements.
3. State why the product(s) and/or service(s) are available from only one source and how that determination was made. Explain the research conducted to support this claim.
4. Provide an explanation to support the belief that the price is fair and reasonable.

**PART III: SOLE SOURCE CERTIFICATIONS**

- A. In my professional opinion, this is the only product or service that can reasonably meet my requirement(s)/specification(s), and this is the only supplier who can provide the product or service. I further certify that the information contained herein is true and correct to the best of my knowledge and belief and would withstand any audit or supplier protest.
- B. I, the undersigned, certify that I and/or the user do not have a financial interest in the above named supplier or contractor, and that I am unaware of any conflict of interest related to this purchase.

xungong  
Digitally signed by xungong  
Date: 2022.04.19 10:36:53 -04'00'  
**Signature**

Xun Gong  
**Printed Name and Title (PI/Researcher/Director/Chair)**

4/18/2022  
**Date**

I, the undersigned, hereby concur with the above justification and authorize the acquisition of the above product(s) and/or service(s) on a sole source basis.

michaelg  
Digitally signed by michaelg  
Date: 2022.04.24 16:27:53 -04'00'  
**Signature**

\_\_\_\_\_  
**Printed Name and Title (President/Vice President/Dean)**  
(Delegations not allowed; emails from absent approvers are acceptable)

4/18/2022  
**Date**

I, the undersigned, hereby concur with the above justification and support a sole source approval for the above product(s) and/or service(s).

See email approval attached 4/18/2022  
**Signature** **Printed Name and Title (Procurement Specialist)** **Date**

I, the undersigned, hereby concur with the above justification and support the acquisition of the above product(s) and/or service(s) on a sole source basis.

See email approval attached  
**Signature** **Printed Name and Title (Procurement Services Associate Director)** **Date**

I, the undersigned, hereby concur with the above justification and authorize the acquisition of the above product(s) and/or service(s) on a sole source basis.

See email approval attached  
**Signature** **Printed Name and Title (Asst. Vice President for Tax, Payables & Procurement)** **Date**

I, the undersigned, hereby concur with the above justification and authorize the acquisition of the above product(s) and/or service(s) on a sole source basis.

See email approval attached  
**Signature** **Printed Name and Title (Chief Financial Officer)** **Date**

**POSTING NOTICE**

5/20/22 9:30am EST 5/23/22 9:30am EST 2226 Trinh Nguyen  
**Date/Time Posted** **Posting End Date** **UCF Control No.** **Procurement Specialist**

## SOLE SOURCE JUSTIFICATION

Please answer the questions below and attach additional documentation if needed.

1. Describe the product(s) and/or service(s) and anticipated use thereof in layman's language.

Future communications and sensing systems in 5G-and-beyond require the use of mmWave frequencies and sophisticated digital modulation schemes to provide high data rates. In those systems, wide-band signals are modulated using Quadrature Amplitude Modulation (QAM) or Orthogonal Frequency Division Multiplexing (OFDM) and then up-converted to mmWave frequencies. The high-frequency signals are then transmitted through the air and propagate inside various environments before they reach the end users. Due to the complex propagation environment, the signals are often distorted due to scattering from the buildings, reflection from multiple surfaces, and attenuation inside different materials. It is critical for researchers to evaluate the signal integrity after passing through the environment for various applications.

Analyzing signals carrying digital modulation requires vector measurements that provide both magnitude and phase information. A vector signal analyzer digitizes all the radio frequency power within the passband of the instrument and puts the digitized waveform into memory. The waveform in memory contains both the magnitude and phase information which can be used by digital signal processing (DSP) for demodulation, measurements, or display processing. The proposed Keysight N9040B UXA Signal Analyzer provides the widest analysis bandwidth in its class and superior phase noise performance at high frequencies. In addition, real time signal analysis for transient signals is enabled with industry-leading PathWave 89600 VSA software.

2. State in detail why only this and no other product(s)/service(s) will satisfy the department's requirements.

Among various specifications, the highest operating frequency and analysis bandwidth are the two most important parameters. The frequency of the N9040B UXA for purchase is up to 50 GHz while the analysis bandwidth is 510 MHz (upgradable to 1 GHz later). These are the best in class. Tektronix has signal analyzers with up to 26.5 GHz operation frequency and 165 MHz analysis bandwidth. Anritsu signal analyzers have a maximum operation frequency of 44.5 GHz with 255 MHz, 510 MHz and 1 GHz analysis bandwidth options. There are the two main competitors in high-end signal analyzers.

Another important parameter is the DANL. DANL or displayed average noise level is a measure used to define the sensitivity of a spectrum analyzer. The DANL specifies all the internal noise of the spectrum analyzer referenced to 1 Hz and represented in dBm/Hz. The DANL is frequency dependent and it increases with frequency. Spectrum analyzers use preamplifiers to reduce DANL. The instrument is unable to measure any input signal that is below this level. Keysight N9040B UXA achieves a DANL of -156 dBm (@30 GHz) while the Anritsu's best signal analyzer MS2850A can only achieve DANL of -142 dBm (@28 GHz). The lower the DANL, the more sensitive the signal analyzer.

When testing radar, electronic warfare, or signal intelligence systems, it is important that we find and measure signals of interest in complex and dynamic environments. Using the real-time spectrum analyzer (RTSA), we can trigger on signals with a mask and even view signals in the time domain. The Keysight N9040B UXA has been achieved RTSA function in a field upgrade. This function is unavailable from both Tektronix and Anritsu products.

The signal analyzer we are buying is to support >10 faculty members in CECS. Therefore, it is our best interest to maximize the performance in frequency, bandwidth and sensitivity for various projects.

## SOLE SOURCE JUSTIFICATION

3. State why the product(s) and/or service(s) are available from only one source and how that determination was made. Explain the research conducted to support this claim.

As mentioned earlier, the Keysight UXA N9040B provides the best performance in its class. The decision was made among the four PIs and 8 other faculty members in the college of engineering when we wrote the proposal to the CECS Research Infrastructure Funds.

Due to saturation in the legacy sub-6 GHz radio bands, research community has been focusing on utilizing higher frequencies. Hence, the research funding has shifted to these mmWave and Terahertz frequencies. Once put together, this testbed will strengthen UCF's presence in wireless and sensing research in mmWave and put the CECS faculty in a stronger position to attract funds from NSF and DoD programs.

This group of faculty members are actively working on mmWave communications, sensing, security and networks. It benefits the department the most with the best equipment under the \$75k budget.

4. Provide an explanation to support the belief that the price is fair and reasonable.

A typical educational discount from a major equipment vendor such as Keysight, Tektronix, and Anritsu is 15% for brand-new equipment. This time Keysight offers a 23% discount on a new UXA N9040B. The equipment before discount is \$166,654. After 23% discount, the price is \$128,323.58. Keysight provides a trade-in value of \$52,500 for an existing equipment (Agilent E4448A spectrum analyzer) in Xun Gong's lab. The E4448A was purchased in 2006 and does not have vector analysis capability. It is already out of warranty. Therefore, it is a good opportunity to use this trade-in to acquire the best signal analyzer in the world for ~\$75,000.

**From:** [Gerald Hector](#)  
**To:** [Joel Levenson](#)  
**Cc:** [Brian Sargent](#); [Trinh Nguyen](#)  
**Subject:** Re: Req 504925 - Keysight Tehcnologies Sole Source  
**Date:** Thursday, May 19, 2022 1:28:26 PM

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Got it. Thanks. I approve.

Regards,

Gerald

Sent from my iPhone

On May 19, 2022, at 1:17 PM, Joel Levenson <[Joel.Levenson@ucf.edu](mailto:Joel.Levenson@ucf.edu)> wrote:

Gerald,

The research into competitors showed that the specifications from competitors did not meet the needs of the department. Assuming that to be true, additional quotes would not be required.

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**From:** Gerald Hector <[Gerald.Hector@ucf.edu](mailto:Gerald.Hector@ucf.edu)>  
**Sent:** Thursday, May 19, 2022 9:52 AM  
**To:** Joel Levenson <[Joel.Levenson@ucf.edu](mailto:Joel.Levenson@ucf.edu)>  
**Cc:** Brian Sargent <[Brian.Sargent@ucf.edu](mailto:Brian.Sargent@ucf.edu)>; Trinh Nguyen <[Trinh.Nguyen@ucf.edu](mailto:Trinh.Nguyen@ucf.edu)>  
**Subject:** Re: Req 504925 - Keysight Tehcnologies Sole Source

Joel:

Their justification for the sole source seems to be based on their internal consultations of eight faculty members who wrote the grant. **I approve of this conceptually given the unique nature of the equipment**, but I have a follow up question: If there are other "players" in this space, should we at least request the campus community to have a quote from them. I am not so sure on this one.

Regards,

Gerald.

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**From:** Joel Levenson <[Joel.Levenson@ucf.edu](mailto:Joel.Levenson@ucf.edu)>  
**Sent:** Tuesday, May 17, 2022 1:38 PM

**To:** Gerald Hector <[Gerald.Hector@ucf.edu](mailto:Gerald.Hector@ucf.edu)>

**Cc:** Brian Sargent <[Brian.Sargent@ucf.edu](mailto:Brian.Sargent@ucf.edu)>; Trinh Nguyen <[Trinh.Nguyen@ucf.edu](mailto:Trinh.Nguyen@ucf.edu)>

**Subject:** Fwd: Req 504925 - Keysight Tehcnologies Sole Source

Gerald,

I support this sole source as well. Research into the suppliers has shown that only one supplier provides the equipment with the specifications needed.

Reply all if you approve and indicate as such or feel free to ask any additional questions you have! Thank you,

Sent from my iPhone

Begin forwarded message:

**From:** Brian Sargent <[Brian.Sargent@ucf.edu](mailto:Brian.Sargent@ucf.edu)>

**Date:** May 13, 2022 at 2:03:45 PM EDT

**To:** Joel Levenson <[joel.levenson@ucf.edu](mailto:joel.levenson@ucf.edu)>

**Cc:** Trinh Nguyen <[Trinh.Nguyen@ucf.edu](mailto:Trinh.Nguyen@ucf.edu)>

**Subject: FW: Req 504925 - Keysight Tehcnologies Sole Source**

Hi Joel,

I support this sole source for the reasons listed below. Other products were researched and none can meet all the performance requirements required by the 10 CECS faculty members.

Please approve/disapprove.

Thanks,

Brian

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**From:** Trinh Nguyen <[Trinh.Nguyen@ucf.edu](mailto:Trinh.Nguyen@ucf.edu)>

**Sent:** Friday, May 13, 2022 1:44 PM

**To:** Brian Sargent <[Brian.Sargent@ucf.edu](mailto:Brian.Sargent@ucf.edu)>

**Subject:** FW: Req 504925 - Keysight Tehcnologies Sole Source

Hi Brian,

I have reviewed the attached sole source and can support it with the

following reasons. Can you please also review to see if you agree or not.

Vendor: Keysight Technologies

Product: UXA N9040B with 50GHz and 510MHz analysis Bandwidth

Total Amount: \$75,823.58

Dept: ECE

**Requirement:** The department needs to purchase a signal analyzer to support more than 10 faculty members in CECS that needs a product that can maximize the performance in frequency, bandwidth, and sensitivity for their various research projects.

**Required Requirements:**

- Highest operating frequency must be up to 50GHz
- Analysis bandwidth must be 510MHz that can be upgraded to 1GHz later
- Need a DANL that can achieve -156 dBm (@30 GHz). DANL (displayed average noise level) is a measure used to define the sensitivity of a spectrum analyzer.
- The equipment must achieve real-time spectrum analyzer (RTSA) function in a field upgrade.

**Research Conducted:** The only high-end signal analyzer out in the market that can meet all the above requirements is the Keysight N9040B UXA. There are only two other competitors, Tektronix and Anritsu, with comparable products but they lack some of the above required requirements.

**Tektronix**

• Operating frequency is only up to 26.5GHz

• Analysis bandwidth is 165MHz

**Anritsu**

• Operating frequency is only up to 44.5GHz

• Anritsu's best signal analyzer can only achieve DANL of -142 dBm (@28 GHz).

Both the Tektronix and Anritsu products does not offer the real-time spectrum analyzer (RTSA) which is needed for testing radar, electronic warfare, or signal intelligence systems. Measuring signals of interest in complex and dynamic environments is important feature for this type of equipment.



**Price is fair and reasonable:** It was noted that Keysight offer the lab a 23% discount on a new UXA N9040B. The equipment before discount is \$166,654. After 23% discount, the price is \$128,323.58. Keysight also provided a trade-in value of \$52,500 for an existing 2006 equipment (Agilent E4448A spectrum analyzer) that's out of warranty to bring the price down to approximately \$75K so the price is deemed fair and reasonable.

Thanks,  
Trinh

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**From:** Reyner Martinez <[Reyner.Martinez@ucf.edu](mailto:Reyner.Martinez@ucf.edu)>  
**Sent:** Wednesday, May 4, 2022 3:51 PM  
**To:** Trinh Nguyen <[Trinh.Nguyen@ucf.edu](mailto:Trinh.Nguyen@ucf.edu)>  
**Subject:** RE: Req 504925 - Keysight Tehcnologies Sole Source

Good afternoon Trinh

I must have had attached the wrong one, I am sorry

Here is the one with the deans signature

Thank you

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**From:** Trinh Nguyen <[Trinh.Nguyen@ucf.edu](mailto:Trinh.Nguyen@ucf.edu)>  
**Sent:** Wednesday, May 4, 2022 3:49 PM  
**To:** Reyner Martinez <[Reyner.Martinez@ucf.edu](mailto:Reyner.Martinez@ucf.edu)>  
**Subject:** FW: Req 504925 - Keysight Tehcnologies Sole Source

Hi Reyner,

Can you please have the Dean/VP sign the attached sole source before I start reviewing. The total dollar amount is over \$75K so will require signature from the Dean.

Thanks,  
Trinh

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**From:** Brian Sargent <[Brian.Sargent@ucf.edu](mailto:Brian.Sargent@ucf.edu)>  
**Sent:** Wednesday, May 4, 2022 3:38 PM  
**To:** Trinh Nguyen <[Trinh.Nguyen@ucf.edu](mailto:Trinh.Nguyen@ucf.edu)>  
**Subject:** FW: Req 504925 - Keysight Tehcnologies Sole Source

Thanks Trinh. Assigning to you.

Not sure if my pdf view is wrong but it doesn't look like the Dean/VP has signed yet.

Regards,

Brian

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**From:** Trinh Nguyen <[Trinh.Nguyen@ucf.edu](mailto:Trinh.Nguyen@ucf.edu)>

**Sent:** Wednesday, May 4, 2022 3:07 PM

**To:** Brian Sargent <[Brian.Sargent@ucf.edu](mailto:Brian.Sargent@ucf.edu)>

**Subject:** Req 504925 - Keysight Tehcnologies Sole Source

Hi Brian,

The above req has a Sole Source. I'm reviewing, please assign to me.

Thanks,  
Trinh

# Quotation



<b>Customer Reference</b>		
<b>Quotation Number</b> 2504537-1	<b>Quotation Date</b> 19-Apr-2022	<b>Expiration Date</b> 17-Jul-2022
<b>Agreement Number / Expires</b>		<b>Final Destination Country</b> United States
<b>Payment Terms</b> NET 30 DAYS		<b>Incoterms</b> DDP United States

**Attention:** Reyner Martinez  
**Customer Address:**  
 University of Central Florida  
 ECE Dept HEC 426  
 4328 Scorpius St  
 ORLANDO FL 32816-8035  
 United States

**Account Manager:**  
 Yamilet Ardavin  
 Telephone: (954) 412-9568  
 Email: yamilet.ardavin@keysight.com

Telephone: +13524970636  
 Email: reyner.martinez@ucf.edu

<b>Please Direct Inquiries/Send Purchase Orders To:</b>	<b>Keysight Sales Office:</b>
Customer Contact Center	Keysight Technologies Inc. / US
Telephone: 1-800-829-4444	1900 Garden of the Gods Road
Fax: 1-800-829-4433	Colorado Springs CO 80907-3423
Email: usa_orders@keysight.com	United States

Item	Product Number/Description	Unit Price	Unit Adjustment	Unit Net Price	Quantity	Extended Price USD
1	<b>N9040B</b> UX A Signal Analyzer KeysightCare Assured First Year Support Return to Keysight Warranty - 1 year Start up assistance hours, UX A 2.4 mm connector, male Operating system, Windows 10 IQ Analyzer and Swept SA Measurement Application Getting Started and Troubleshooting Guide Negotiated Discount 23%	2,632.00	-605.36	2,026.64	1	2,026.64
	<b>Notes :</b> ***Special discount applied. See terms and conditions below.***					
	N9040B-550 Frequency Range, 2 Hz To 50 GHz Negotiated Discount 23%	114,711.00	-26,383.53	88,327.47	1	88,327.47

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Item	Product Number/Description	Unit Price	Unit Adjustment	Unit Net Price	Quantity	Extended Price USD
	N9040B-B5X Analysis bandwidth, 510 MHz Negotiated Discount 23%	49,311.00	-11,341.53	37,969.47	1	37,969.47
	<b>Estimated Weeks Delivery: To Be Advised</b>				<b>Item Net Total:</b>	<b>128,323.58</b>
2	<b>W1184-257195</b> Trade in credit PL 12	-52,500.00	0.00	-52,500.00	1	-52,500.00
	<b>Notes :</b> Notes: Trade-in credit offered for the return of product(s) towards the purchase of new/Premium Used Keysight equipment. Please reference on your purchase order the quotation number, that there is a trade-in unit(s) on your order, the model/option configuration of the trade-in unit(s), and the serial number of the unit(s) being returned for credit. Trade-In units must be in "good working condition" for full credit. See terms and conditions for more information.					
	<b>Estimated Weeks Delivery: To Be Advised</b>				<b>Item Net Total:</b>	<b>-52,500.00</b>

<b>Unit Price Total</b>	114,154.00
<b>Adjustment Total</b>	-38,330.42
<b>Total</b>	<b>USD 75,823.58</b>

## Comments:

Stated delivery times are based on current supplier response and are subject to change.

At this time we are unable to provide delivery information for any item(s) with delivery of To Be Advised (TBA). Keysight Technologies reserves the right to re-quote delivery at time of order placement for any item whose delivery is To Be Advised (TBA).

The discount rate(s) stated on this quotation is predicated upon customer ordering all the products and quantities as specified on this quotation. Changes to product mix and/or quantities may affect the discount percentage.

Unless otherwise specified in this quote, the named place of the Incoterms corresponds to the ship-to location.

End user's address must appear on the purchase order for sales support reasons.

This is an offer for the items, prices, and quantities specified in this quotation. Any deviation from the information herein may impact order acceptance, pricing and/or delivery. Any negotiated terms or prices are a one-time offer unless otherwise specified. This offer includes delivery to one location.

Delivery dates are estimated and subject to availability at the time of order placement. On your purchase order, please reference this quotation number,

# Quotation



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Purchase Agreement (if applicable), requested delivery date, and if you will accept early delivery.

Invoicing on partial shipments will be considered acceptable unless otherwise noted on your purchase order.

Tax amounts are estimated. If the items are exempt from sales tax, please ensure that a valid Tax Exemption Certificate, referencing Keysight Technologies as the vendor, is submitted with your Purchase Order. Tax is subject to change based on the Ship To address of the purchase order.

In the event that Keysight is requested to apply for the Individual Validated License (IVL), Keysight is required to be the Exporter of Record and INCOTERMS must be CIP, DAP or DDP. This quotation may need to be requested to reflect the correct Incoterms, and delivery dates may be revised. Please contact the US Department of Commerce at 202-482-4811 for additional information on obtaining an IVL.

Please submit your purchase order to the Sales Office identified on this quote above.

Unless otherwise agreed in writing by Keysight, to the extent permissible by law, Keysight's obligation to provide productivity and start-up assistance (that may include consulting and training services) will expire six (6) months from the invoice date.

The dates for any Keysight training classes are tentative. Keysight Technologies must receive customer's Purchase Order at least two weeks prior to class start date. Keysight requires a minimum of six people to attend the class. Should Keysight need to cancel the class due to low attendance, Customer will be notified ten days prior to the scheduled start date. Keysight recommends refundable tickets for all travel and lodging in the event that a class must be canceled due to low attendance.

Please reference your quotation number and that you are trading in units through the Trade-In Program on your purchase order.

Keysight defines "good working condition" as the following:

1. The instrument must power up when turned on.
2. The unit must successfully pass its self-tests, and have any required interconnect RF cables included which are used to pass the self-tests.
3. The unit must be free of serious cosmetic defects including a cracked/broken display, deep gouges to the instrument body, broken or non-usable connectors etc...
4. The returned unit must be the same model and option configuration as was described on the quote.
5. The unit does not need to be calibrated prior to return.

Find more information about Keysight's Trade-In Program at <http://tradein.em.keysight.com/en/overview>

Unless otherwise specified in the Product Description or notes, this quotation does not address Buy American (BAA) or Trade Agreements (TAA) requirements. Please contact Keysight if BAA or TAA apply to your acquisition.

\*\*\*\*If interested in a monthly payment, ask about KeysightAccess.

Your purchase of hardware products, services, license to software and spare parts ("Items") is governed by applicable terms and documents referenced herein and the terms and conditions found at: [HTTP://WWW.KEYSIGHT.COM/view/TERMS-US](http://WWW.KEYSIGHT.COM/view/TERMS-US) If you have a separate agreement with Keysight covering the purchase of Items referenced in this quotation, the terms of the separate agreement will apply to those Items. Keysight expressly objects to any

## Quotation



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<b>Payment Terms</b> NET 30 DAYS		<b>Incoterms</b> DDP United States

different or additional terms in your purchase/sales order documentation, unless agreed to in writing by Keysight. Availability dates are estimated at the time of the quotation. Actual delivery dates or delivery windows will be specified at the time Keysight acknowledges and accepts your purchase order. The above conditions shall apply to the fullest extent permitted by the law. You may have other statutory or legal rights available. Commodities, technology or software exported from the United States of America ("U.S.") or from other exporting countries will be subject to the U.S. Export Administration Regulations and all exporting countries' export laws and regulations. Diversion contrary to U.S. law and the applicable export laws and regulations is prohibited. Warranty: Unless otherwise indicated herein, hardware products or software licenses referenced in this quotation will receive a ninety (90) day replacement warranty. Replaced parts will become the property of Keysight.